

REMARKS

The Office Action of June 14, 2005, and the cited art have been carefully considered. Reconsideration of the rejection of the application is respectfully requested based on the amendments and following discussion.

Applicant(s) invention uses a high domed lens to disperse light away from the lamp axis. This is particularly useful where the dome projects from an adjacent surface to be illuminated, such as a ceiling.

REJECTION 103:

2. Claims 1-2, 4-8 and 11 were rejected under 35 USC 103(a) over Yasumoto US 4,941,072 in view of O'Connell US 6,086,227.

The rejection of Claims 1-2, 4-8 and 11 as being unpatentable under 35 U.S.C. 103(a) over the combination of Yasumoto '072 in view of O'Connell '227 is respectfully traversed and reconsideration thereof is requested.

Yasumoto '072 shows a line of LEDs held in a trough that is covered by a linear lens having a solid, hemispherical cross-section. The linear lens includes ears or a rib that snap fits in a corresponding slot in the reflective trough. The goal of Yasumoto '072, is to generate an "M" like light distribution, for example for a facsimile machine or scanner, where even illumination over a narrow band is desired.

O'Connell '227 shows a PAR lamp with an incandescent light source held in a parabolic reflector covered by a nearly flat lens. O'Connell '227 teaches the use of spiral reflector facets in combination with spirally arranged lenticels on the lens. A very smooth spot of illumination is produced with little or no filament image, banding, or spotting in the narrow beam image.

Yasumoto '072 is not analogous art. It is a light source, but a practitioner in the lighting arts would not look to the construction of an elongated LED trough for teachings regarding the optics of a threaded incandescent lamp. *"Obviousness is tested by "what the combined teachings of the references would have suggested to those of ordinary skill in the art."... But it "cannot be established by combining the teachings of the prior art to produce the claimed invention, absent some teaching or suggestion supporting the combination.*

...And "teachings of references can be combined only if there is some suggestion or incentive to do so." In re Fine 5 USPQ2d 1596, 1599(2) Here there is no suggestion or motivation to combine a solid body, linear lamp lens with an incandescent lamp source.

The lens in Yasumoto '072 is not domed. A dome is a *"a vault, having a circular plan and usually in the form of a portion of a sphere."* Random House College Dictionary 1984. A dome is a hollow shell, arching over an enclosed volume. It is not a solid section of a ball. Yasumoto's lens is a solid body, not a dome. It optically performs as a solid body, and not as a domed lens.

The optics of Yasumoto '072 focuses the light on the centerline of the lamp. This is the desired result in a photocopier or facsimile machine. It is the result of being solid body, paralleling the optical structure that functions as a condenser lens. This is shown in FIG.s. 6, and 7 of Yasumoto '072. The Applicant's optical goal is exactly reverse. The Applicants states in paragraph 8, pages 4-5, *"In these ways the light from the light source (filament 19) either directly or by reflection encounters the steep sides of the domed lens 20 and is refracted sharply to the side, away from the axis 34 thereby giving a large and even beam spread."* Yasumoto '072 does not show, teach or suggest beam spreading. It shows beam concentrating. This because it uses a solid optic, not a domed structure. This underlines why Yasumoto '072 is non-analogous art.

Both Yasumoto '072 and O'Connell '227 are concerned with an evenly illuminated central beam spot. These spots are normally or narrowly concentrated. The Applicant is concerned with an evenly illuminated pattern of much greater breadth. There is no suggestion that a method to narrow a beam should or could be used to broaden a beam. In fact it cannot. No combination of Yasumoto '072 and O'Connell '227 leads to the Applicant's invention. Further, it is doubtful that any sensible combination of the references is possible. Clearly the spiral facets, and spiral lenticels of O'Connell cannot be applied to the elongated lens and trough of Yasumoto '072. Clearly the condenser lens of Yasumoto '072 generates a spot beam, but so does the smaller, less expensive plate lens of O'Connell. There is no reason to use more material in a heavier lamp to gain the same result. In either case combining Yasumoto '072 and O'Connell '227 does not lead to the Applicant's invention.

No showing has been made of how Yasumoto '072 and O'Connell '227 together make the claimed invention obvious. The Board of Appeals was explained this requirement quite clearly before.

"In the instant application, the examiner has done little more than cite references to show that one or more elements or subcombinations thereof, when each is viewed in a vacuum, is known. The claimed invention, however, is clearly directed to a combination of elements. That is to say, appellant does not claim that he has invented one or more new elements but has presented claims to a new combination of elements. To support the conclusion that the claimed combination is directed to obvious subject matter, either the references must expressly or impliedly suggest the claimed combination or the examiner must present a convincing line of reasoning as to why the artisan would have found the claimed invention to have been obvious in light of the teachings of the references. . . . Based upon the record before us, we are convinced that the artisan would not have found it obvious to selectively pick and choose elements or concepts from the various references so as to arrive at the claimed invention without using the claims as a guide. It is to be noted that simplicity and hindsight are not proper criteria for resolving the issue of obviousness. Ex parte Clapp, 227 USPQ 972, 973 (B.P.A.I. 1985)

3. Claim 9 was rejected under 35 USC 103(a) over Yasumoto US 4,941,072 in view of O'Connell US 6,086,227 and Schwaller US 5,245,515.

The rejection of Claim 9 as being unpatentable under 35 U.S.C. 103(a) as being obvious over the combination of Yasumoto '072 in view of O'Connell '227 and Schwaller '515 is respectfully traversed and reconsideration thereof is requested.

Schwaller '515 shows a headlamp with a light source held in parabolic or elliptical reflector, covered with a concave lens.

The purpose of a headlamp is to focus a beam down the road. This in fact shown in Schwaller '515 FIG.s 1 and 5 where beams of light are either parallel or converge on the lamp axis. There is no suggestion to diverge the beam. Schwaller '515 uses a flat or slightly concave lens. There is no domed lens used, at least in the highly protuberant form disclosed by the Applicant. Combining the narrow focusing spot lenses of Yasumoto '072, O'Connell '227 and Schwaller '515 does not show teach or suggest a beam spreading domed optical structure. Combining the flat lenses of O'Connell '227 or Schwaller '515 or

focusing condenser lens Yasumoto '072 do not show teach or suggest a domed lens spreading light.

4. Claims 3 and 10 were rejected under 35 USC 103(a) over Yasumoto US 4,941,072 in view of O'Connell US 6,086,227 and Leadford US 6,190,023.

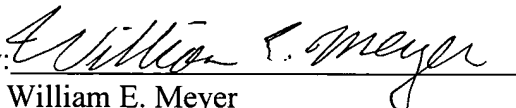
The rejection of claim 3 and 10 as being unpatentable under 35 U.S.C. 103(a) as being obvious over the combination of Yasumoto '072 in view of O'Connell '227 and Leadford '023 is respectfully traversed and reconsideration thereof is requested.

Leadford '023 shows a lighting fixture having a roughly parabolic reflector and a planar cover lens that in combination enclose an arc discharge lamp. There is a light shield to prevent glare that reflects light back to the reflector for useful projection. The specification describes in detail the surface features of the reflector for best optical projection.

Leadford '023 does not describe, show or suggest a domed portioned of a lamp, and fails to show teach or suggest the same element that the other references fail to show. In combination, none of the references show teaches or suggests a light spreading dome shaped lens.

It is believed that a full and complete response to the Office Action has been made, that the Application as amended is patentably distinct over the cited art, and that the case is now in condition to be passed to issue. Reconsideration of the amended application is therefore requested, and an early favorable notice of allowance is courteously solicited.

Respectfully submitted,

By: 
William E. Meyer
Reg. No. 30,719
Attorney for Applicants

OSRAM SYLVANIA INC.
100 ENDICOTT STREET
DANVERS, MA 01923
(978) 750-2384
(978) 750-2045 FAX